

CLAIMS

1. Handle for vehicle doors or hinged lids with a handle (10) that can be manually operated and with a switch (20) that can be manually operated and is integrated in the handle (10),
  - in which operation of the handle (10) or the switch (20) acts on a locking system in the vehicle, which serves to lock, unlock, open, and/or close a lock in the door or hinged lid,
  - with a first shell-like assembly in the push-button switch, which assembly is produced by a multiple-component injection-molding technique and is referred to as the shell unit (21),
    - which consists of a nondeformable shell-like housing (22), an elastic membrane (23) that seals the base of the visible end of the shell, and a nondeformable push button (24) on the membrane (23) at the base,
    - wherein the shell unit (21) has a shell opening (28) on its rear side opposite the membrane (23),
    - with a second assembly, which is preassembled from a circuit board (33) with electrical feed and conduction cables (19) and a microswitch (30) mounted on the circuit board (33),
    - wherein the second assembly is inserted into the interior (46) of the shell unit (21) and thus constitutes an

insertion unit (31),

-- wherein the position of the insertion unit (31) in the shell-like housing (22) of the shell unit (21) is secured by a safety plate (37), which at least partially covers the circuit board (33) of the inserted shell unit (21), and

-- wherein the remaining part (47) of the shell edge (43) of the housing (22) of the shell unit (21) serves as a mold and receives a sealing compound (48), which, after it has hardened, seals the shell opening (28).

2. Handle in accordance with Claim 1, characterized by the fact that the safety plate (37) is fixed in the projecting shell edge 43 of the shell unit (21) by sharp-pointed tips (38) arranged along the periphery of the safety plate (37).

3. Handle in accordance with Claim 1 or Claim 2, characterized by the fact that a ring-shaped volume reducer (35) is inserted in the interior (46) of the shell unit (21), and after the insertion unit (31) has been inserted, the interior of the ring encloses the microswitch (31) of the insertion unit (31) at a radial distance (36).

4. Handle in accordance with any of Claims 1 to 3, characterized by the fact that the push button (24) of the first shell unit (21) has an axial extension (26) in the interior (46)

of the shell for receiving a spring-tensioned pusher (40), which in the final assembled state is aligned with the contact actuator (32) of the microswitch (30).

5. Handle in accordance with any of Claims 1 to 3, characterized by the fact that the push button (24) of the first shell unit (21) has projections (45), which extend axially into the interior (46) of the shell and segmentally surround the pusher (40) and/or the microswitch (30) at a certain radial distance, at least in certain areas.

6. Handle in accordance with any of Claims 1 to 5, characterized by the fact that the housing (22) of the first shell unit (21) has pins (44), whose position conforms to the arrangement of holes (34) in the circuit board (33) of the second insertion unit (31), which is inserted in the shell unit (21), and/or to an arrangement of holes (39) in the safety plate (37), which is placed over the insertion unit (31).

7. Handle in accordance with any of Claims 1 to 6, characterized by the fact that the circuit board (33) is directly secured to the housing (22) of the first shell unit (21) by pins, which pass through corresponding holes and are bent or welded at their ends that extend from the holes.